```
//  Determine an integer is prime or not
//  Unfortunately, this program NOT work for input '4'!!
#include <iostream>
using namespace std;
int main()
{
  int   i, p;
  char  more;
  do                {
    cout << "\n\t\tInput an integer: ";
    cin  >> p;

    for (i = 2; i < p / 2; i++)
      if (p % i == 0)     {
        cout << "\n\t\t" << p << " is NOT prime";
        break;
      }
    if (i >= p / 2)
      cout << "\n\t\t" << p << " is PRIME";
    cout << "\n\t\t\tDo more (Y/N) ? ";
    cin  >> more;
  } while (more == 'y' || more == 'Y');
}

/*  Calculate sum of digits in an integer
#include <iostream>
using namespace std;
int main()
{
  int    i, x, xx, sum;
  char   more;
  do            {
    cout << "\n\t\tInput x: ";
    cin  >> x;
    for (i = 0, sum = 0, xx = x; x > 0; i++, x = x / 10)
      sum = sum + x % 10;
    cout << "\n\t\tThe digit sum of " << xx << " is " << sum;
    cout << "\n\t\t\tDo more (Y/N) ? ";
    cin  >> more;
  } while (more == 'y' || more == 'Y');
}*/

/* Demo digit count in an integer
#include <iostream>
using namespace std;
int main()
{
  int   x, xx, i;
  char  more = 'y';
  while (more == 'y' || more == 'Y')  {
```

```
    cout << "\n\t\tInput x: ";
    cin  >> x;
    for (i = 0, xx = x; x > 0; i++)
      x = x / 10;
    cout << "\n\t\tThere are " << i << " digits in " << xx;
    cout << "\n\t\t\tDo more (Y/N) ? ";
    cin  >> more;
  }
}*/
```